

Voluntary Report – Voluntary - Public Distribution

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Report Name: 2023 Rice Production Update

Country: Korea - Republic of

Post: Seoul

Report Category: Grain and Feed

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Report Highlights:

On November 14, 2023, Statistics Korea (KOSTAT) released its final estimate of 2023 rice production at 3.7 million metric tons (MMT), up an additional 0.5 percent from the initial rice production estimates released in early October and down 1.6 percent overall from the prior year. Rice production acreage decreased by 2.6 percent compared to 2022, but increased yield due to favorable weather conditions (sunlight and precipitation) partially offset the reduced acreage. To reduce traditional rice planted area, the Korean government has recently introduced incentives for growing rice for flour, which could have the additional benefit of curbing methane emissions by over one third compared to conventional rice cultivation.

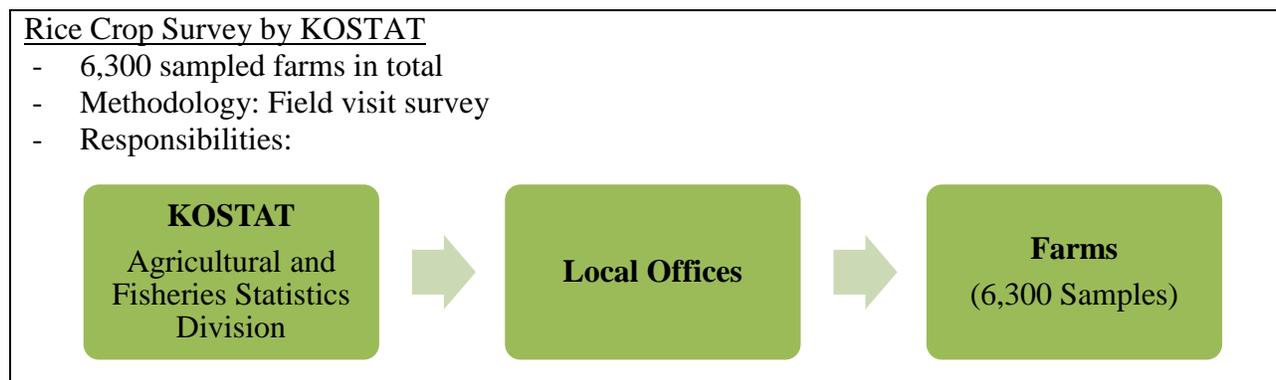
Milled Rice

Rice Production

On November 14, 2023, Statistics Korea (KOSTAT) released the final production estimate of the 2023 rice crop at 3.702 million metric tons (MMT), milled, after the rice harvest in Korea was completed. This 1.6 percent decrease in production is driven mainly by reduced planted area. Earlier estimates were updated based on increased yield estimates following favorable weather conditions from September to October 2023, such as longer sunlight and suitable precipitation.

For further details, see [KOSTAT’s announcement on Rice Production in 2023](#). Please refer to the [November 2023 Grain and Feed Update](#) for the overall supply and demand status of rice in Korea and historical trends.

Figure 1 – Rice Crop Survey Methodology by Statistics Korea



Rice Acreage Reduction Policy

The Korean government’s objective to reduce rice acreage by substituting other grains (soybean and wheat) has had some success, resulting in a 2.6 percent decrease in rice acreage from 2022. Under the policy to relieve the oversupply of rice, the government has also prioritized converting high-yield rice varieties into higher quality varieties with superior taste. Future research on rice will likely concentrate on developing new high-quality varieties. Moreover, the government has encouraged increased production of rice for flour through subsidies and support for new product development.

The recent finding that rice for flour might reduce methane gas emissions compared to conventional rice varieties could also influence future increases in rice for flour planted acreage. Analysis by the Rural Development Administration (RDA) found that the shorter cultivation period of the ‘Baro-mi 2’ variety used to make rice flour can reduce periods of water storage, thereby reducing methane gas emissions by 36 percent. In contrast to normal rice varieties, which are transplanted starting from the end of May and have an average cultivation period of 136 days, ‘Baro-mi 2’ is transplanted starting from the end of June and has an average cultivation period of 117 days. Moving forward, the government plans to continue research and

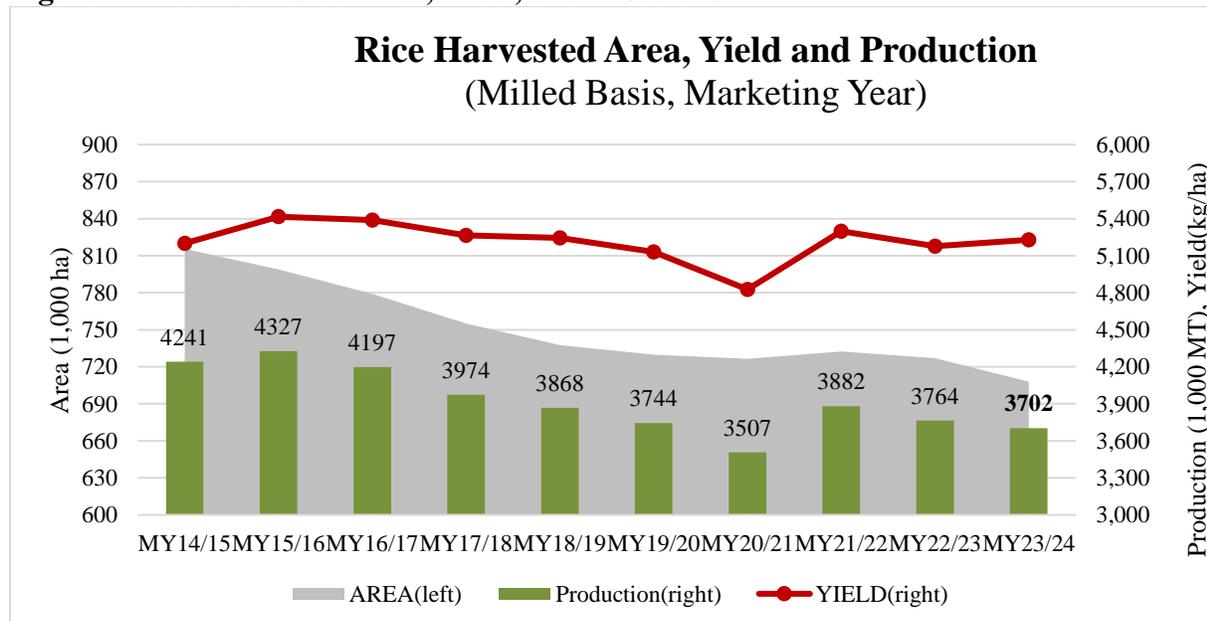
development of flourey rice cultivation to help achieve carbon neutrality in the agriculture sector. Please refer to the [press release of the Ministry of Agriculture, Food and Rural Affairs \(MAFRA\) from November 14, 2023](#).

Yield

Favorable weather developments during the heading, flowering, and harvest stages in 2023 (summarized below) resulted in an average rice yield of 5,229 kg per hectare (milled basis), up 1 percent from the prior year and 1.9 percent from the 5-year average (5,132 kg per ha, from 2019 to 2023).

- 1) **(Growth and Development stage)** Longer sunlight exposure from July through August favored an increase in the number of complete grains per square meter, offsetting a decrease in the number of spikelets per pod due to heavy rainfall during June and July.
 - Rainfall from June to the first half of July measured 307.9 mm in 2023, up from 195.9 mm in 2022.
 - Sunlight exposure from July to the first half of August measured 227.1 hours in 2023, up from 221.0 hours in 2022.
- 2) **(Maturity stage)** An increase in the average temperature and lower precipitation during September and October resulted in increased yield.
 - The average temperature from September to the first half of October was 20.6 degrees Celsius in 2023, up from 19.5 degrees Celsius in 2022.
 - Precipitation from September to the first half of October was lower in 2023 at 198.0 mm, down from 229.7 mm in 2022.

Figure 1- Rice Harvested Area, Yield, and Production



Source: Ministry of Agriculture, Food, and Rural Affairs (MAFRA), Korea Statistics (KOSTAT)

Table 1.
Rice Production Forecast

Rice Production Forecast (Milled Basis, Calendar Year)					
	CY2022	CY2023			Change from CY2022
		1st Estimation (Oct) ^{1/}	Final (Nov) ^{2/}	Change from Oct Estimate	
Area (1,000 ha)	727	708	708	0.0%	-2.6%
Yield (kg/ha)	5,177	5,203	5,229	0.5%	1.0%
Production (1,000MT)	3,764	3,684	3,702	0.5%	-1.6%

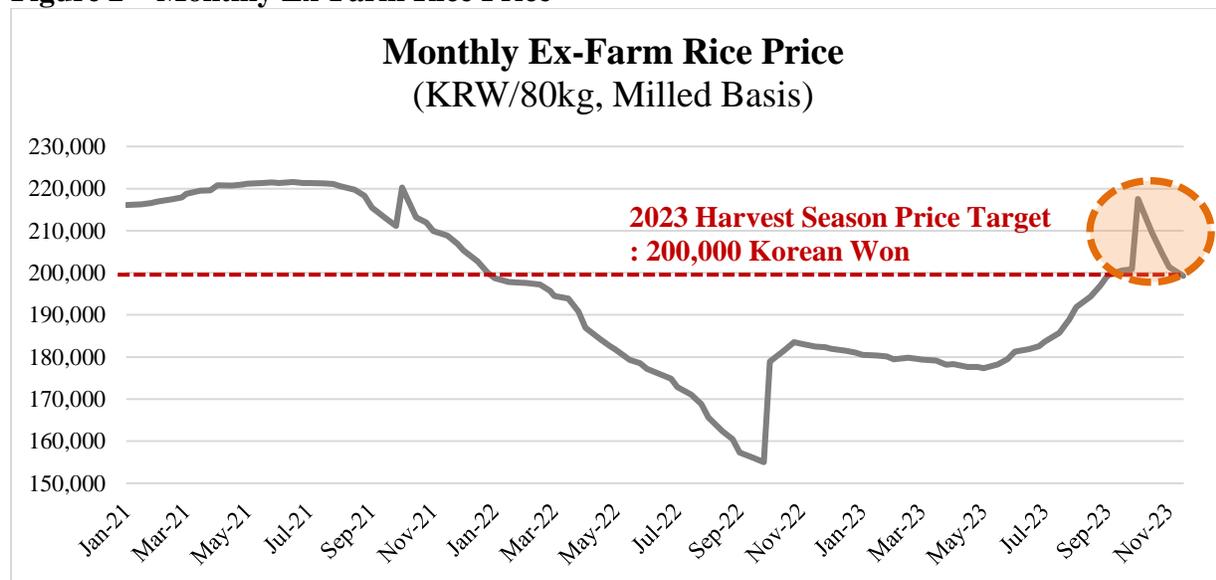
1/ KOSTAT Survey for September 11-20, 2023

2/ KOSTAT final revision in November 2023

Domestic Prices

The domestic rice price (ex-farm basis) reached the target price set by MAFRA of 200,000 Korean won (KRW) for 80 kilograms as of the end of September 2023. However, due to concerns of a potential price decrease during the next summer due to Korea’s chronic rice oversupply, the domestic price started trending down again from the beginning of November. Accordingly, the Korean government announced several measures to protect the current price level, by initiating the government purchase of rice earlier than usual in December (120,000 MT, rough basis) and by releasing 400,000 MT of government stocks into feed in 2024.

Figure 2 – Monthly Ex-Farm Rice Price



Source: Korea Statistics (KOSTAT)

Production, Supply and Distribution: Rice

Rice, Milled Market Year Begins Korea, Republic of	2021/2022		2022/2023		2023/2024	
	Nov 2021		Nov 2022		Nov 2023	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested (1000 HA)	732	732	727	727	708	708
Beginning Stocks (1000 MT)	1018	1018	1334	1358	1352	1428
Milled Production (1000 MT)	3882	3882	3764	3764	3702	3702
Rough Production (1000 MT)	5211	5211	4998	4998	4954	4900
Milling Rate (.9999) (1000 MT)	7450	7450	7531	7531	7473	7555
MY Imports (1000 MT)	437	448	262	268	460	488
TY Imports (1000 MT)	430	440	300	270	460	488
TY Imp. from U.S. (1000 MT)	86	88	0	70	0	N/A
Total Supply (1000 MT)	5337	5348	5360	5390	5514	5618
MY Exports (1000 MT)	53	53	58	58	100	108
TY Exports (1000 MT)	55	54	55	58	100	108
Consumption and Residual (1000 MT)	3950	3937	3950	3904	3930	3860
Ending Stocks (1000 MT)	1334	1358	1352	1428	1484	1650
Total Distribution (1000 MT)	5337	5348	5360	5390	5514	5618
Yield (Rough) (MT/HA)	7.1189	7.1189	6.8748	6.8748	6.9972	6.9209

(1000 HA) ,(1000 MT) ,(MT/HA)
 MY = Marketing Year, begins with the month listed at the top of each column
 TY = Trade Year, which for Rice, Milled begins in January for all countries.
 TY 2023/2024 = January 2024 - December 2024

Attachments:

No Attachments.